Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of Service Rules for the 746-764 and 776-794 MHz Bands, and Revision to Part 27 of the Commission's Rules	**WT Docket No. 99-168**

To: The Commission

REPLY COMMENTS OF DDI POCKET, INC.

Introduction

Pursuant to Section 1.415 of the Commission's Rules, 47 C.F.R. § 1.415, DDI Tokyo Pocket Telephone, Inc. (hereinafter "DDI Pocket") hereby submits these Reply Comments in response to the Commission's Notice of Proposed Rule Making in WT Docket No. 99-168.[1]

Statement of Interest

DDI Pocket, a wholly owned subsidiary of DDI Corporation, operates the world's largest network based on the Personal Handyphone (PHS) standard. At 6.5 million subscribers, PHS is the world's most widely adopted mobile wireless access technology utilizing time division duplexing (TDD) on licensed frequencies. TDD techniques carry transmit and receive traffic on the same radio frequency, and unlike cellular systems, do not require paired frequencies. . PHS technology is well

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[1] In the Matter of Service Rules for the 746-764 and 776-794 MHz Bands, and Revisions to Part 27 of the Commission's Rules, Notice of Proposed Rulemaking (""NPRM"), WT Docket No. 99-168, FCC 99-97, released June 3, 1999.

established and readily applicable to the 746-764 and 776-794 MHz bands, which are among the most suitable frequencies for personal communications because of their favorable propagation characteristics, especially in terms of building penetration, and the attractive size, cost and availability of components. DDI POCKET's experience and the PHS model are relevant and instructive to regulators, like the FCC, who endeavor to promote local access competition through wireless means. This is especially true where support for TDD-based technologies, such as PHS, are considered.

DDI POCKET and PHS Background

From the late 1980's, DDI POCKET was the driving commercial force behind the PHS concept – a mass market wireless access service based on lightweight devices that offered highly differentiated voice and data services at a fraction of the price of cellular offerings. Through deployment of the advanced wireless access technology and good marketing, DDI became the market leader in PHS with a 60% subscriber market share and achieved profitability in only three years from network launch.

Today's PHS continues to fundamentally differ from cellular service. PHS offers 64 kbps packet data with 128 and 384 kbps service planned for 2000 and 2001 respectively[2]. PHS also offers longer battery life, smaller handsets, more low-cost PDA options, location-based services, easy fixed/mobile integration, walkie-talkie mode, a wider array of messaging services and the world's first portable video phone. Japan's Nikkei Trendy recently performed an exhaustive study comparing PHS to Cellular. They found that PHS had superior urban coverage and service quality.

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[2] In contrast, cellular networks typically support user data transfer of 9.6 kbps. Cellular efforts to increase these data rates focus on 3G, which is expected to launch in late 2001 with peak user data rates of 64 kbps, even with entirely new system equipment.

The single most significant event leading to the explosive growth that the Japanese wireless market enjoys today was the launch of PHS in the second half of 1995, giving consumers truly differentiated choices and more cost effective options for access to the public telephone network and the Internet. Soon, China, Taiwan, and Thailand will turn on PHS networks and also give their customers similar benefits.

TDD-based systems, such as PHS, are able to realize the highest cost/performance gains from spectrally-efficient transmission and reception techniques, such as adaptive array antennas (smart antennas). DDI POCKET is the commercial world leader in deployment of such adaptive array antenna systems, which number approximately 100,000 and are at the heart of its competitive superiority and cost advantages. DDI POCKET's vendors have received awards from ARIB for creating spectrally efficient base stations and all operators have been asked by the Ministry of Posts and Telecommunications ("MOPT") to use this technology.

Conclusions

Without a regulatory framework/policy that accommodated TDD-based technology[3], the Japanese telecom industry could not have launched such innovative PHS products and services and establish a strong competitive foothold in the face of entrenched cellular/PCS carriers. DDI therefore agrees with ArrayComm's comments filed on July 23, 1999, and reinforces its position that the FCC should adopt a spectrum policy for the 746-764 and 776-794 MHz bands that accommodate TDD-based technologies, such as PHS. To this end, the FCC should provide for unpaired spectrum in the 746-764 and 776-794 MHz frequency bands and consider technical rules, e.g., band plan and emissions rules, that create a viable operating environment for TDD-based systems. It is our

[3] In this case it was provided by MOPT.

judgement that this course of action would create broader network access competition by facilitating the deployment of innovative TDD-based technologies that are more economical for the mass market and better-suited to Internet access than current or proposed FDD-based systems. DDI Pocket would be pleased to share its regulatory, marketing and technology experiences in more detail in order to assist the FCC in carrying out its obligations in this rulemaking process.

Respectfully submitted,

/S/

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